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**FAIRCHILD SEMICONDUCTOR CORPORATION**

UNITED STATES DISTRICT COURT

FOR THE NORTHERN DISTRICT OF CALIFORNIA  
SAN FRANCISCO DIVISION

5 ALPHA & OMEGA SEMICONDUCTOR,  
6 INC., a California corporation; and  
ALPHA & OMEGA SEMICONDUCTOR,  
LTD, a Bermuda corporation

#### **Plaintiffs and Counterdefendants.**

V.  
**FAIRCHILD SEMICONDUCTOR  
CORP., a Delaware corporation,  
Defendant and Counterclaimant**

## Berendam and Counterberendam.

Case No. C 07-2638 JSW (EDL)  
(Consolidated with Case No. C 07-2664 JSW)

# **FAIRCHILD SEMICONDUCTOR CORPORATION'S REPLY TO AOS'S OPPOSITION TO FAIRCHILD'S MOTION TO COMPEL PRODUCTION OF DOCUMENTS**

Date: September 16, 2008

Date: September  
Time: 2:00 p.m.

Courtroom: E, 15th Floor  
Hon. Elizabeth D. Laporte

## AND RELATED COUNTERCLAIMS

**REDACTED VERSION**

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1    **I. SUMMARY OF THE ARGUMENT**

2    AOS has withheld relevant documents from Fairchild for over a year. AOS has increased its rate  
 3    of document production since Fairchild filed its motion to compel, which would be encouraging if AOS  
 4    were actually producing the documents Fairchild requested and that were relevant to the issues in the  
 5    case. Unfortunately, AOS has chosen to produce the chaff while continuing to hold on to the wheat,  
 6    apparently hoping it can convince the Court that the chaff is the wheat.

7    Proving AOS's power MOSFET products infringe Fairchild's patent claims requires showing  
 8    AOS's methods of manufacture, and the structure and operation of AOS's power MOSFET devices.  
 9    Fairchild's motion to compel seeks documents ***directly relevant to those issues*** for the AOS products  
 10   Fairchild has accused of infringement:

- 11     • AOS's methods of manufacturing its accused products;
- 12     • AOS's simulation of the structure and operation of its accused products;
- 13     • the device structure of AOS's accused products; and
- 14     • the operation of AOS's accused products.

15   The documents produced by AOS are woefully insufficient. AOS asserts that it has produced relevant  
 16   documents in each of these categories. Tellingly, however, AOS does not assert it has produced ***all*** of  
 17   its relevant documents in ***any*** of the requested categories. AOS's assertions regarding its production are  
 18   misleading in some places and flat out wrong in others in its attempt to cloud the issues regarding its  
 19   lack of discovery compliance.

20   Fairchild's requests are not cumulative, overbroad or unduly burdensome. On the contrary,  
 21   Fairchild's requests are narrowly tailored to obtain information relevant to Fairchild's infringement  
 22   analysis, and Fairchild has tried to minimize reasonably AOS's burden. For instance, Fairchild recently  
 23   informed AOS that certain "in-line data" need not be produced and expressed willingness to consider  
 24   any proposals to reduce the burden of producing the in-line data. AOS now complains in its opposition  
 25   that having to review its documents to produce only what Fairchild has requested will actually  
 26   significantly increase the burden on AOS. AOS believes it can completely shield relevant documents,  
 27   arguing both that it is too burdensome to produce all of them and too burdensome to produce a selection.  
 28   AOS cannot have it both ways.

1        AOS's opposition further asserts that the parties' agreement on representative parts permits it to  
 2 refuse to produce all the relevant documents, complaining that Fairchild has not identified representative  
 3 groupings for the accused AOS products and requesting that Fairchild be ordered to do so. The  
 4 representative parts agreement as originally contemplated, however, anticipated that the parties would  
 5 group their own products. In its opposition, AOS admits for the first time that its products are not  
 6 designed to share common technical features relevant to Fairchild's patents, and thus AOS itself cannot  
 7 propose meaningful product groupings. Consequently, AOS requests that Fairchild be ordered to do  
 8 something that AOS admits it cannot do, even with its greater knowledge of its parts and its access to its  
 9 device engineers and to all of its manufacturing, simulation, device structure and device operation  
 10 documents. AOS's request that Fairchild be ordered to group AOS's parts without the benefit of all the  
 11 necessary discovery should be rejected, and AOS should be compelled to produce all the requested  
 12 documents.

13 **II. ARGUMENT**

14        As detailed in Fairchild's opening brief, Fairchild has specifically requested AOS's  
 15 manufacturing documents, simulation documents, device structure documents and device operation  
 16 documents. The requested documents are highly relevant to the issue of infringement for the patents  
 17 asserted by Fairchild.<sup>1</sup> Fairchild's requests are directed to documents showing AOS's methods of  
 18 manufacture and the structural and operational features of AOS's parts relevant to claim elements in the  
 19 Fairchild's asserted patents, including those related to controlling the location of "breakdown" initiation,  
 20 the presence of an "abrupt junction" structural feature, and the distribution of "avalanche current" in the  
 21 device for the Fairchild Mo patents, and those related to the presence of structures such as contacts and  
 22 feeds, and increasing the breakdown voltage in the termination region of the device for the '947 patent .  
 23 AOS refuses to make a complete production of these documents.

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26 <sup>1</sup> Fairchild has asserted five related patents referred to herein as the "Fairchild Mo patents" (U.S. Patents  
 27 No. 6,429,481, 6,521,497, 6,710,406, 6,828,195, and 7,148,111), and U.S. Patent No. 6,818,947,  
 referred to herein as "the '947 patent."

28

1           **A. Fairchild's Requests are Narrowly Tailored to Seek Relevant Information That is  
2 not Cumulative, Overbroad or Unduly Burdensome to Produce, and AOS's  
3 Production is Insufficient**

4           Contrary to AOS's arguments, Fairchild's requests are narrowly tailored to obtain information  
5 relevant to Fairchild's infringement contentions and not available from any other source. The  
6 documents produced by AOS, however, are largely unresponsive to Fairchild's requests, as described  
7 below on a category by category basis.

8           *Manufacturing Documents.* The requested manufacturing documents are highly relevant  
9 documents that describe in detail the method by which a semiconductor device is manufactured. These  
10 documents allow a person skilled in the art to understand how a device is made, to evaluate the  
11 characteristics of its structures and can be used to run computer simulations of the device's structural  
12 and electrical properties. Declaration of Dr. Richard A. Blanchard in Support of Fairchild's Motion to  
13 Compel (Docket No. 177) (the "Aug. 12 Blanchard Decl."), at ¶¶ 9, 11-14 . Fairchild has requested the  
14 manufacturing documents that will allow it to evaluate the accused devices and run such simulations.

15           One of the most fundamental categories of manufacturing document requested by Fairchild is  
16 AOS's "recipes." Recipes contain the parameters and information that provide the **details** of the various  
17 manufacturing steps. This information can be used to determine the structural and operational  
18 characteristics of AOS's accused devices, including where breakdown initiates, whether an abrupt  
19 junction is present, and the distribution of avalanche current in the device. *Id.* at ¶¶ 12-14. AOS's  
20 present production of recipes is insufficient.<sup>2</sup> AOS has produced **no** documents in entire categories of  
21 recipes, such as ion implantation, polysilicon deposition and doping, trench etch, and critical dimension  
22 measurements for well, source, contact and trench. In some other important categories, such as

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23  
24           2 [REDACTED]  
25  
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27  
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1 oxidation and implant drive step recipes, AOS's production is incomplete.<sup>3</sup> Nor has AOS produced all  
2 of its temperature, time, and gas flow parameters.<sup>4</sup>

3 AOS asserts that it need not produce its recipe specifications because its process flows include  
4 recipe information. However, as described below, the recipe information in the process flow produced  
5 by AOS is incomplete.

6 [REDACTED]

7 [REDACTED]

8 [REDACTED] AOS is wrong.

9 [REDACTED]

10 [REDACTED]

11 [REDACTED]

12 [REDACTED]

13 [REDACTED]

14 [REDACTED]

15 [REDACTED]

16 [REDACTED]

17 [REDACTED]

18 [REDACTED]

19 [REDACTED]

20 [REDACTED]

21 [REDACTED]

22 \_\_\_\_\_

23<sup>3</sup> [REDACTED]

24 [REDACTED]

25 [REDACTED]

26 [REDACTED]

27 AOS has not produced all of its oxidation and implant drive step recipes. See footnote 3 above.

28

1 [REDACTED] Without AOS's recipe specifications, Fairchild does not have any way to perform  
2 this same translation for other process flows produced by AOS. Sep. 3 Blanchard Decl., at ¶¶ 9-15.

3 While Fairchild might be able to guess at some of the translation [REDACTED]

4 [REDACTED], Fairchild cannot be placed in the position of hoping that its guesses accurately depict  
5 AOS's recipes, when authoritative information is readily available in AOS's recipe documents that AOS  
6 refuses to produce.

7 [REDACTED]  
8 [REDACTED]  
9 [REDACTED]  
10 [REDACTED]  
11 [REDACTED]  
12 [REDACTED]  
13 [REDACTED]  
14 [REDACTED]  
15 [REDACTED]  
16 [REDACTED]  
17 [REDACTED]  
18 [REDACTED]  
19 [REDACTED]

20 \_\_\_\_\_

21 5 [REDACTED]  
22 <sup>6</sup> Each heating step performed after implantation of dopants can affect the shape and depth of the  
23 resulting junctions. Consequently, manufacturers typically allot a "thermal budget" that refers to the  
24 overall heating applied to the wafer during the various manufacturing steps. Parameters affecting the  
25 thermal budget include the temperature of a heating step, the length of time of the heating, and the  
identity and amounts of gas used. Sep. 3 Blanchard Decl., at ¶ 14.

26 <sup>7</sup> The etch chemistry affects the shape and depth of the etched materials. Details include whether an  
27 etch step uses a "wet" or "dry" chemical process, whether it is isotropic or anisotropic, the identity of the  
chemicals used, and the temperature and length of time for each etch step. Sep. 3 Blanchard Decl., at ¶  
14.

1 [REDACTED]

2 [REDACTED]

3 AOS also asserts that it has produced its GDS files<sup>8</sup> and identifying information for all 342

4 products initially accused by Fairchild. AOS's Opposition Brief, at pp. 6-7. Once again, AOS is wrong.

5 [REDACTED]

6 [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 [REDACTED] Because a particular process can be used to produce more than one part and a

10 particular part can be manufactured with different processes, Fairchild needs information identifying the

11 correlation between AOS's GDS files and all of its accused parts ***and*** processes.

12 Additionally, AOS has not produced any manufacturing documents for the 56 products Fairchild

13 identified and requested information for on May 21, 2008, including even the wafer specifications and

14 epitaxial specifications. These products appear to have been introduced to the marketplace since AOS

15 first identified its relevant products. AOS should produce complete manufacturing information for these

16 additional parts.

17 Simulation Documents.

18 [REDACTED]

19 [REDACTED]

20 Manufacturers create and maintain simulation data for their parts and processes, including both the data

21 input to the simulation and the simulation results.<sup>9</sup> [REDACTED]

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22

23 <sup>8</sup> GDS files specify the shape and location of regions on the masks used during photolithography

24 manufacturing steps. Manufacturers typically use technology files or bias tables in connection with

25 GDS files, which correlate each process layer of the device with GDS layer information. Aug. 12

26 Blanchard Decl., at ¶ 12. AOS has not produced complete identifying information for its GDS files.

27 <sup>9</sup> Simulation input information is typically found in files referred to as coefficient files, input command

28 files, mask files, structure boundary files, and measured doping files. Aug. 12 Blanchard Decl., at ¶ 17.

Using the input information concerning a device, a simulation software program develops a simulation

of the structural and operational features of a device. The output of the simulation may be in the form of

simulated electrical data, output files (structure, doping, and/or grid output files), or other information.

Continued on the next page

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Because simulations model the structure and operation of devices, they provide information relevant to the structural and operational features claimed in the Fairchild's patents, such as where breakdown initiates, whether an abrupt junction is present and the distribution of avalanche current for the Fairchild Mo patents, and whether gate runners, contacts and other features are present and whether breakdown voltage increases in the termination region for the '947 patent. Aug. 12 Blanchard Decl., at ¶¶ 15-19; Sep. 3 Blanchard Decl., at ¶¶ 5-8. AOS did not argue in its opposition brief, ***because it could not***, that the requested simulation documents are not relevant.

10

AOS has not produced its simulation data. After Fairchild filed its motion to compel, AOS produced numerous "Design Review" documents, perhaps hoping to persuade the Court that this production satisfies its discovery obligations. This production misses the mark. AOS admits that the produced documents contain only "selected results," and include only "visual evidence" from AOS's simulations, such as graphs, pictures and screenshots, rather than the raw data that Fairchild seeks.<sup>10</sup> AOS's Opposition Brief, at p. 7. Fairchild has requested not just snippets of graphs, pictures or screenshots from AOS's simulation analyses, but all of AOS's simulation documents that characterize the structure and operation of its accused products, including the raw input and output data that Fairchild can use to perform its own simulation analyses and to compare its results with AOS's results.

19

AOS objects to producing the raw data files because, it asserts, doing so is "more burdensome" than producing the Design Review documents, because, in its view, review of the documents requires

20

"access to specialized design tools" and the "assistance of specially trained engineers." AOS's

21

23

24

Continued from the previous page

25

The output data may also include drawings of the device structure showing current paths, electric field lines, or other information. *Id.* at ¶ 18.

26

<sup>10</sup> In addition, the Design Review documents appear to reflect information from the development and/or pre-production stage of product development, whereas Fairchild seeks simulation information about the production versions of AOS's accused devices.

27

28

1 Opposition Brief, at pp. 7-8, 16. Any such claim of burden is not credible. Since AOS performs its  
 2 simulations, AOS of course has access to the specialized design tools it uses to simulate its devices and  
 3 to device engineers trained in the use of those tools. No specialized review of these documents is  
 4 necessary because they are not intertwined with issues of attorney-client or other privilege - AOS need  
 5 only collect and produce the documents. Indeed, AOS makes no specific assertions that *production* of  
 6 the simulation documents is burdensome, only their *review*. AOS's Opposition Brief, at pp. 7-8.

7 Device Structure Documents. Device structure documents reflect the structural features of  
 8 **actually manufactured devices**, as opposed to the simulated features reflected by simulations. Some  
 9 device structure documents reflect the use of techniques, such as scanning capacitance microscopy  
 10 ("SCM"), spreading resistance profiles ("SRP") and scanning electron microscopy ("SEM"), that capture  
 11 an *image* of the device, allowing visual analysis of its structure. Aug. 12 Blanchard Decl., at ¶¶ 22-24.  
 12 Other device structure documents reflect the use of techniques, such as secondary ion mass spectroscopy  
 13 ("SIMS"), that capture **structural data** that characterizes the device, allowing data analysis of its  
 14 structure. *Id.* at ¶ 21. Regardless of the particular technique used, these documents collectively reflect  
 15 direct evidence possessed by AOS of the structural features of devices actually manufactured and sold  
 16 by AOS, including the shape and location of various structures and regions in the device and the  
 17 conductivity type and dopant concentration of such structures and regions. Analysis of these documents  
 18 can show, for example, the location of breakdown, whether an abrupt junction is present, and whether  
 19 avalanche current is uniformly distributed, all relevant to the Fairchild Mo patent claims, and whether  
 20 structural features such as gate runners, contacts, feeds, and isolation trenches are present, and whether  
 21 breakdown voltage increases in the termination region, each relevant to the '947 patent. *Id.*

22 AOS's current production of device structure documents is insufficient. AOS asserts that it has  
 23 produced some SEM images and SRP analyses responsive to this category, but tellingly AOS does not  
 24 state that it has produced **all** of its SEM images and SRP analyses, never mind all of its device structure  
 25 documents. AOS's Opposition Brief, at p. 8. The documents AOS cites as evidence of its production  
 26 are essentially useless.

27  
 28

1 [REDACTED]  
 2 [REDACTED] AOS should be  
 3 required to make a full and complete production of the requested device structure documents.

4       AOS also refuses to produce "in-line data." In-line data is collected during the manufacturing  
 5 process, and typically includes information concerning the structural features of devices, such as the  
 6 location and dimensions of various structural features, including the depths of trenches, doped wells,  
 7 and other features relevant to many asserted claim elements of the Fairchild Mo patents, and the  
 8 presence of gate runners, contacts and other features relevant to asserted claim elements of the '947  
 9 patent. Sep. 3 Blanchard Decl., at ¶ 17. Additionally, in-line data can be used as input information for  
 10 simulations of AOS's accused products. *Id.*

11       AOS's pattern of producing "chaff" while withholding the "wheat" is also seen in its approach to  
 12 in-line data. After Fairchild filed its motion to compel, AOS provided samples of certain "in-line"  
 13 manufacturing data that were not relevant to Fairchild's infringement analysis. Fairchild informed AOS  
 14 that documents embodied by these samples need not be produced and clarified the specific inline data  
 15 Fairchild is seeking. Declaration of Leonard J. Augustine, Jr. in Support of Fairchild's Reply ("Sep. 3  
 16 Augustine Decl."), filed concurrently herewith, Exh. 1 (August 25, 2008, letter from Hulse to Doscher)  
 17 (requesting "other categories of in-line data, including trench measurements, field oxide measurements,  
 18 gate oxide measurements, poly gate measurements, and other measurements relating to the structure of  
 19 AOS's accused products"). Fairchild further stated that it was "willing to consider any proposals AOS  
 20 may have to reduce the burden of producing" the in-line data. *Id.* at 2. Rather than welcome this  
 21 clarification and proposal to reduce the parties' burden, AOS now complains that this "increase(s)  
 22 significantly" the production burden on AOS. AOS's Opposition Brief, at p. 16 (emphasis in original).  
 23 AOS thus argues both that it is too burdensome to produce all the in-line documents and too  
 24 burdensome to produce a selection. AOS cannot have it both ways.

25       AOS's focus on the notion that in-line data is collected from individual wafers is a straw man  
 26 argument. AOS's Opposition Brief, at p. 16 ("Fairchild has never contended that deviations, on  
 27 individual wafer level, are relevant to their infringement analysis"). Although in-line data is collected  
 28 from individual wafers, it is typically collected over the duration of manufacturing for each part and

1 collated into ***average measurements*** and ***standard deviations*** over a period of time. These average  
 2 measurements and standard deviations reflect the "real world" structural measurements of devices  
 3 manufactured and sold over that time period. This data is typically reviewed and analyzed periodically  
 4 to verify that the manufacturing processes and tools are meeting device specifications. The in-line data  
 5 is necessarily collected and stored in a way to facilitate this review and analysis, generally in a single  
 6 database. Sep. 3 Blanchard Decl., at ¶ 18. Thus, although in-line data is collected from individual  
 7 wafers, its value for infringement analysis is primarily in its collated average measurements and  
 8 standard deviations. It is this collated data that Fairchild seeks, rather than individual wafer level data.

9       *Device Operation Documents.* Fairchild's device operation document requests are narrowly  
 10 tailored to obtain data used in the semiconductor industry to evaluate the operational characteristics of  
 11 power MOSFET devices that are relevant to Fairchild's infringement analysis, including "electrical  
 12 breakdown current-voltage characteristics data," "operational transistor current-voltage characteristics  
 13 data," and "unclamped inductive switching data."<sup>11</sup> Aug. 12 Blanchard Decl., at ¶¶ 27-30. This  
 14 information is directly relevant to showing the operational features claimed in Fairchild's patents, such  
 15 as the location of breakdown initiation and the distribution of avalanche current for the Fairchild Mo  
 16 patents. *Id.* at ¶ 32.

17       AOS's production of device operation documents is insufficient. AOS claims it has produced  
 18 certain "unclamped inductive switching data" ("UIS data"), "electrical breakdown current-voltage  
 19 characteristics data," and "operational transistor current-voltage characteristics data." AOS's  
 20 Opposition Brief, at pp. 8-9. Once again, however, AOS has not claimed that it has produced ***all*** of the  
 21 relevant device operation documents requested. Further, the documents cited by AOS -- ***all of which***  
 22 ***were produced after Fairchild filed its motion to compel*** -- are almost universally useless. [REDACTED]

23  
 24       <sup>11</sup> The requested device operation documents also include those containing raw data used by AOS to  
 25 create graphs, charts and plots in its published datasheets. Aug. 12 Blanchard Decl., at ¶ 31. This raw  
 26 data is relevant to showing the structure and operation of AOS's devices. *Id.* at ¶ 32. Subsequent to  
 27 Fairchild filing its motion to compel, it appears that AOS has produced a significant number of these  
 28 documents, although Fairchild has not had sufficient time to determine whether AOS has produced all  
 of the requested documents.

1 [REDACTED]  
2 [REDACTED]  
3 [REDACTED]  
4 [REDACTED]  
5 [REDACTED]  
6 [REDACTED]  
7 [REDACTED]  
8 [REDACTED]  
9 [REDACTED]  
10 [REDACTED]

11 **B. Producing the Requested Documents is Not Unduly Burdensome**

12 Contrary to AOS's assertions, producing the requested documents is not unduly burdensome.

13 AOS has accused over 4,700 Fairchild parts of infringement. In accordance with the representative  
14 parts agreement, Fairchild has produced manufacturing documents for the parts that are representative  
15 of the accused products, which are manufactured using 50 different manufacturing process technologies.

16 Additionally, Fairchild recently agreed to produce manufacturing documents for approximately 60  
17 additional parts within the identified manufacturing process technologies to allow AOS to verify  
18 Fairchild's selection of representative groupings and parts. Fairchild seeks from AOS complete  
19 manufacturing documents for approximately 396 accused parts manufactured using approximately 113  
20 distinct (according to AOS) process flows. This does not constitute a significant burden on AOS.

21 [REDACTED]  
22 [REDACTED]  
23 [REDACTED]  
24 [REDACTED]  
25 The requested simulation documents similarly are not burdensome to produce, as previously  
26 discussed above. Nor are the requested device structure documents burdensome to produce.  
27 [REDACTED]

28 [REDACTED] The requested in-line data is not burdensome to produce because it is

1 typically stored and maintained in a way to facilitate review and analysis of collated data, generally in a  
 2 single database. Sep. 3 Blanchard Decl., at ¶ 18.

3 Finally, the requested device operation documents are relatively short in length.  
 4 [REDACTED]  
 5 [REDACTED]  
 6 [REDACTED]

7 Consequently, AOS will not need to produce a significant number of pages, even for approximately four  
 8 hundred parts.  
 9 [REDACTED]

10 Any complaints by AOS of undue burden based on the volume of documents it has already  
 11 produced are baseless. The vast majority of documents produced by AOS are not responsive to  
 12 Fairchild's requests. The minimal burden imposed by production of the requested documents, combined  
 13 with the high relevance of the requested information to Fairchild's infringement analysis, counsels that  
 14 all documents requested by Fairchild should be produced.

15 **C. Fairchild Cannot Group AOS's Products into Representative Groups and Related  
 16 Representative Parts With the Information Produced By AOS to Date**

17 AOS filed this lawsuit in May of 2007 and has accused over 4,700 Fairchild power MOSFETs of  
 18 patent infringement. Fairchild counterclaimed and originally alleged infringement by 342 AOS parts,  
 19 recently adding 56 more. To reduce the burdens of discovery -- both production and review -- for both  
 20 parties and to reduce trial time, Fairchild proposed that the parties identify representative parts. As  
 21 proposed by Fairchild, each party would identify groups of *its own* parts that would be treated as  
 22 fungible for purposes of infringement and would select *its own* representative part for each identified  
 23 group. Once a party had done so, technical discovery would be limited to the representative parts plus a  
 24 few additional parts to test the representative part choice. *See, e.g.*, Declaration of Leonard J. Augustine  
 25 in Support of Fairchild's Motion to Compel (Docket No. 178) ("Aug. 12 Augustine Decl."), Exh. 22  
 26 (memorializing Nov. 12, 2007, meet and confer proposal that "each party can send the opposing party a  
 27 list of the parts that are representative in each category and the opposing party can randomly choose an  
 28 agreed number of parts for which to obtain discovery"). Each party would also have the opportunity to

1 verify the opposing party's selections through interrogatory responses or a 30(b)(6) deposition. *Id.* At  
 2 trial, all parts within a group would be deemed to infringe or not based on the outcome for the  
 3 representative part for that group. *Id.* ("eventually those representative parts would be litigated at  
 4 trial"). Only after the Court urged the parties to come to such an agreement, Aug. 12 Augustine Decl.,  
 5 Exh. 25 (Nov. 27, 2007, Hearing Transcript), at transcript p. 21, lines 5-22 (description by the Court of a  
 6 representative parts agreement in a prior case where "for each product family, there would be  
 7 manufacturing process documents and materials specifications common to that family . . . ."), did AOS  
 8 finally agree to exchange representative parts lists.

9 On the date agreed for exchange, Fairchild produced its representative parts list, identifying  
 10 different representative process technologies for the thousands of accused Fairchild parts, and a  
 11 representative part for each such technology. *See* Augustine Decl., Exh. 27 (Fairchild's Representative  
 12 Technologies List). Shortly thereafter, Fairchild provided AOS a list correlating the representative  
 13 process technologies with Fairchild's thousands of accused parts. As amended, Fairchild's lists identify  
 14 50 different manufacturing process technologies and correlate over 4,700 Fairchild parts with those  
 15 technologies.<sup>12</sup> Fairchild's production and AOS's review with respect to Fairchild's accused products  
 16 has proceeded on these representative parts.<sup>13</sup>

17 In contrast, the "representative parts list" AOS provided to Fairchild included ***all 342*** of its  
 18 accused products without grouping those parts in any meaningful way. *See* Augustine Decl., Exh. 26  
 19 ("AOS's Parts List"). AOS's Parts List additionally identified a multitude of different process flows  
 20 used by AOS to manufacture its products, but similarly failed to group those process flows. *Id.* AOS's  
 21 Parts List did not identify different manufacturing process technologies or any other categories upon  
 22 which the parties could proceed with production for only representative AOS parts. *Id.*

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23

24 <sup>12</sup> Fairchild recently requested that AOS drop its accusations of infringement against a significant  
 25 majority of Fairchild's products. Sep. 3 Augustine Decl., Exhs. 2 and 3 (Aug. 8 and 20, 2008, letters  
 from Litts to Wu).

26 <sup>13</sup> Per agreement with AOS, Fairchild recently agreed to produce manufacturing documents for  
 27 approximately 60 additional parts within the identified manufacturing process technologies to allow  
 AOS to verify Fairchild's selection of representative groupings and parts.

1           Faced with AOS's refusal to group its products into representative groups, Fairchild endeavored  
 2 to do so. Despite its efforts, Fairchild has not been able to group AOS's products into representative  
 3 groups ***based on the documents presently produced by AOS.*** Fairchild has informed AOS that it cannot  
 4 do so without a complete set of AOS's manufacturing documents.

5           AOS misleadingly states that Fairchild assured the Court that Fairchild would be able to identify  
 6 representative AOS products based on AOS's "process specs and the process flows," quoting Fairchild's  
 7 counsel at a November 27, 2007 hearing:

8           That is the best evidence that would show whether they form a deep well  
 9 inside the body or not . . . When we see their process specs and process  
              flows, it will be much easier to determine which of their products infringe.

10 AOS's Opposition Brief, at p. 3 (quoting from Aug. 12 Augustine Decl., Exh. 25 (Nov. 27, 2007  
 11 Hearing Tr.), at 24:25-25:13. AOS conveniently removed the beginning of the quote, which when  
 12 restored, shows that Fairchild has always maintained that production of AOS's manufacturing  
 13 documents, including recipes, would be necessary for any representative grouping of AOS's parts:

14           We have repeatedly asked them, even before we filed the lawsuit, **give us**  
 15 **your product recipe and specs.** That is the best evidence that would show  
 16 whether they form a deep well inside the body or not . . . When we see  
              their process specs and process flows, it will be much easier to determine  
              which of their products infringe.

17 Aug. 12 Augustine Decl., Exh. 25 (Nov. 27, 2007 Hearing Tr.), at 24:25-25:1 (emphasis added). Later  
 18 at that same hearing, Fairchild's counsel again stated: "That's what we have been asking for, give us  
 19 the ***recipes.***" *Id.* at 30:12-13 (emphasis added).

20           **D.     AOS's Request That Fairchild Be Ordered To Group AOS's Parts Should Be  
 21 Denied**

22           AOS has been unwilling or unable to group its parts into representative groups.<sup>14</sup> AOS naturally  
 23 knows more about its parts than does Fairchild, and AOS has access to all of its documents and to the  
 24 expertise of its personnel involved in the design, development and manufacturing of its parts. If AOS is

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25  
 26           <sup>14</sup> Fairchild specifically requested AOS do so before filing its motion to compel. Aug. 12 Augustine  
 27 Decl., Exh. 11, at p. 3 (requesting that "AOS propose groupings of its own products, in the same way  
              that Fairchild has already done for its products" and noting this would be a "more efficient approach  
              given that AOS has far more information about its products than Fairchild").

1 unable to propose meaningful product groupings with such knowledge and access, certainly Fairchild  
2 cannot be expected to be able to do so based upon an incomplete and inadequate production of even  
3 AOS's basic manufacturing documents.

In fact, AOS now states that "its products are not designed to share common technical features relevant to Fairchild's patents, and therefore it does not group its products according to those features. . . . Rather, AOS's products are individually designed for targeted applications and thus, as AOS explained to the Court, it was not in a position to propose meaningful product groupings. . . ." AOS's Opposition Brief, at p. 2. If AOS is correct, it may not even be possible to create meaningful representative groupings for AOS's parts. Accordingly, AOS's request that Fairchild be ordered to group AOS's parts makes no sense and should be denied. The only way that Fairchild might possibly be able to propose meaningful product groupings for AOS's parts is if it has all the manufacturing documents it has requested. If, in fact, AOS's parts cannot be grouped into meaningful representative groupings, then Fairchild needs the requested manufacturing documents to evaluate AOS's accused parts individually. Either way, AOS needs to produce its relevant documents.

### 15 | III. CONCLUSION

16 For these reasons, Fairchild respectfully requests that the Court issue an Order compelling AOS  
17 to produce all manufacturing documents, simulation documents, device structure documents and device  
18 operation documents in AOS's possession, custody, or control for AOS's accused products, including for  
19 the additional 56 products identified by Fairchild in its May 21, 2008, letter to AOS.

21 | DATED: September 3, 2008

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